

Notice of Allowability

Application No.

09/781,125

Examiner

Bernard E Souw

Applicant(s)

GERLACH ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE & Amendment filed 01/09/2004.
2. ☒ The allowed claim(s) is/are 2-25, 28 and 30-34.
3. ☒ The drawings filed on 02/28/2001, Fig. 6 amended 05/05/2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 01/09/2004 in this application after final rejection mailed 07/09/2003. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/09/2004 has been entered.

Interview

2. A telephone interview has been conducted on 12/30/2003 and an interview summary (PTOL-413) has been previously mailed to the Applicant.

Amendment

3. The amendment filed along with the RCE on 01/09/2004 has been entered.

Claims 1, 26, 27 and 29 have been cancelled.

New claims 31-34 have been added.

Pending in this office action are claims 2-25, 28, and 30-34.

This office action has been made with all the amendments being fully considered.

Terminal Disclaimer

4. A Terminal Disclaimer has been submitted along with the RCE, and also has been entered and approved.

Response to Applicant's Arguments

5. Applicant's arguments filed 01/09/2004 have been fully considered. The following is the Examiner's response.

Claim 1 having been cancelled and claims 2, 3, 7, 8 and 20 having been appropriately amended according to what has been agreed upon during the 12/30/2003 interview, the application is now allowed, including the new claims 31-34, the latter for their being dependent upon allowed claims.

ALLOWANCE

6. Claims 2-25, 28, and 30-34 are allowed.

Claims 2-25, 28, and 30-34 are subsequently renumbered to claims 1-30 by the examiner.

Reasons for Allowance

7. The following is an examiner's statement of reasons for allowance:

An apparatus including multiple ion guns and associated multiple ion optical columns, comprising one sealable ion gun chamber having positioned therein multiple ion guns (as recited in claim 2 in original numbering), or a multiple of sealable ion gun

chambers each enclosing one or more ion guns (as recited in claim 3 in original numbering), each ion gun capable of generating an ion beam, the multiple ion beams forming a multiple ion columns, each optical column being associated with one of the multiple ion guns for focusing and directing the corresponding beam toward a target contained in a vacuum chamber that is equipped with vacuum valves, each vacuum valve associated with each of the ions guns, the vacuum valves selectively opening to allow the corresponding ion beam to pass from the gun to the target, or selectively closing to seal the corresponding ion gun chamber, is neither anticipated nor rendered obvious by any prior art.

Claim 20 (original numbering) is allowed for reciting a system of multiple column focused ion beams comprising multiple ion guns for forming multiple ion beams, a bar having holes for forming multiple ion optical lenses, each optical lens corresponding to one of the multiple ion beam sources, thus forming together a multiple of ion beam columns, whereby the multiple ion optical lenses share a common voltage applied to the bar.

Claims 4-19, 21-25, 28 and 30-34 (original numbering) are also allowed because of their dependencies, either directly or indirectly, upon claims 2, 3 and/or 20.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

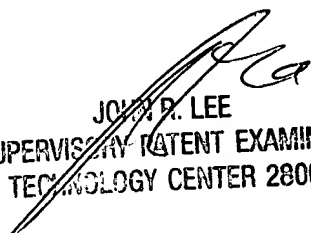
Communications

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes
June 18, 2004


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800